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Summer Time Allocation in Vocational Agriculture Programs in the United States (12-Month Programs, Extended Contract).

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SUMMER TIME ALLOCATION IN VOCATIONAL AGRICULTURE PROGRAMS IN THE UNITED STATES

A Dissertation

Submitted to the Graduate Faculty of the
Louisiana State University and
Agricultural and Mechanical College
in partial fulfillment of the
requirements for the degree of
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in

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by
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ABSTRACT

The purpose of this study was to determine what activities vocational agriculture teachers in the United States believed should be a part of their summer programs and what they actually did during the summer of 1983.

Three instruments were used to collect data for this study: a two-page questionnaire to state supervisors of agricultural education to determine what statewide activities were scheduled for teacher participation, a three-page questionnaire to 227 vocational agriculture teachers to gather program and teacher information and to determine what the teachers believed should be accomplished during their summer program, and a one-page bi-weekly summary to be used by the teachers to report the time they actually spent on activities during the summer of 1983.

Analyses were conducted to determine: the mean percentage of time that teachers believed should be allotted to 38 summer activities, the mean percentage of time actually allotted to these activities during the summer, if any significant differences occurred between the two means by activity and if any significant relationships existed between selected program/teacher variables and selected actvities.

Results revealed 20 significant differences between what should be and what was actually accomplished on summer activities.

Five significant correlations existed between time spent and selected variables but none of these were practically significant.

Chapter I

INTRODUCTION

Education is a lifelong process, extending from birth until death. Likewise, agriculture and its many supporting fields are continuous and year-round in nature. Why then is the school year truncated to 180 days? Why is education in agriculture often performed during the least productive (agriculturally) times of the year?

Through the first 400 years in what is now the United States of America the length of the school year changed to meet the requirements or financial needs of the changing society (for example the towns of 50 families or less were required to hold school for only 6 months by Massachusetts law (Cohen, 1974; Shepard & Baker,1977).

By World War I the nine-month school year was the norm. Rural and urban communities worked together to establish a compatible schedule from 1900 until the 1940's (Shepard & Baker, 1977).

Even though nine-months was the accepted school year length, the passage of the Smith-Hughes Act in 1917, that stated "... schools shall provide for directed or supervised practice in agriculture, either on a farm provided for by the school or other farm, for at least six months per year; ...", resulted in agricultural educators extending the school year for their

students to 12-months. Justification for this extended period included the teacher's supervision of agriculture experience programs that were not only being conducted during the school year but during the summer as well (Luft, 1982).

This supervision could not end with the regular school year if the student was to gain the optimum advantages from practical agricultural experiences. The Federal Board of Vocational Education (1918) in a bulletin on the organization and administration of agricultural education programs under the law enacted February 23, 1917 stated that "... each school should be required to provide a properly qualified teacher who is employed for 12 months" (p.16). They noted that the 12 months were not meant to be spent all in the classroom but rather that the teacher should be available during the growing season when the home project work of the pupils is underway and that his vacation would be taken during the dull season or winter.

Even in the modern era of agriculture and agricultural education when students are not only practicing production agriculture but preparing for all phases of agribusiness, the supervision of their practice is needed. The crop and animal diseases and problems must be diagnosed as they arise and their cure demonstrated and explained. The proper method of harvesting winter wheat must be demonstrated in July at harvest time. The knotter on the baler that breaks and must be repaired is the

ultimate in practical application of those skills practiced and mastered during the long winter. The heat in the greenhouse must be controlled and the flowers for fall sale must be started and their growth regulated for effective marketing. The cooperative work student must also be supervised during the summer, with employer's and employee's questions being answered and problems dealt with as they arise (Briers, 1983; McVay, 1982).

Vocational agricultural education is no longer only for boys who will engage in production agriculture after graduation. Its students include boys, girls, and adults who are interested in any of the multitude of phases of agriculture/agribusiness. "The industry of agriculture itself shows some of its components only in the summer" (Briers, 1983, p.4). Teachers must be employed during these times to take this opportunity to teach the practical aspects of agriculture. Many agricultural educators emphasize teaching as the most important summer duty and the one that allows for extended contract accountability (Blackwell, Rowland and Strong, 1980; McVay, 1982).

All teachers could use extended time to inventory and clean their classrooms and to update their lesson plans. Only the vocational agriculture teacher is responsible to teach a seasonal subject to a wide variety of students (Briers, 1983; Lee, 1982).

Supervised agricultural experience programs have recently been renamed Supervised Occupational Experience Programs (SOEP)

(Phipps, 1980). These SOEP's need not be the production of animals or crops as many believe. Any agricultural program that is continuing and growing is advocated for the student. These may include ownership or placement experiences. In order for students to receive year-round supervision it is necessary for the teacher of vocational agriculture to be employed for a time longer than the standard nine or ten months that other teachers are employed.

Other activities also require the time and expertise of the vocational agriculture teacher during the summer. Teachers and students are often involved in one or more of the following: fairs, conventions, leadership camps, contests, school farms, greenhouses, or the operation of other learning laboratories. Each situation may be different and the 50 states may differ in their requirements for teachers of vocational agriculture.

Additional demands on the teacher's time might be larger numbers of students, advisory councils, new reporting forms and more classes with fewer periods for planning and supervision. All of this is likely to make it more difficult for the vocational agriculture teacher of the 1980's to perform all of the duties that might be expected of him or her.

With this in mind, more information on the modern summer vocational agriculture program was needed. Many lists of important summer activities exist (Blezek, 1977; Luft, 1976; Miller & Moss, 1980; Phipps, 1980) but no information is available

as to what the vocational agriculture teacher believes should be done as compared to what is actually completed and accomplished by summer's end when the teacher is planning in the spring. This information would prove valuable to the teacher planning an effective summer program. He or she would be able to compare his or her own thoughts on important activities and use the experience of others to plan a summer that is both workable and effective in accomplishing the goals of the program and teacher. McClay (1976) used records of his summer program to evaluate and improve plans for the next year. Likewise this national information would be helpful to others in their program evaluation and improvement.

Statement of the Problem

In light of the possibly demanding summer schedule of the vocational agriculture teacher and the great variety of responsibilities there is a lack of information on what the vocational agriculture teachers believe should be accomplished during the summer, what duties they are addressing, and whom they are serving. Several state studies have been conducted and many articles written concerning quality summer programs in vocational agriculture but no nationwide study or national data base is available for teachers to use in comparing and revising their summer schedule of activities.

Purpose

This study was an effort to determine what teachers of vocational agriculture in the United States are asked to do, what they believe they should do and what they actually are doing during their summer employment.

Objectives

1. Determine state level activities held during the summer that may require the attendance of the vocational agriculture teacher, the number and types of secondary vocational agriculture programs in the United States, and contract lengths of vocational agriculture teachers as reported by the state supervisors of vocational agriculture programs.
2. Identify the activities that vocational agriculture teachers believed should be a part of their summer programs in vocational agriculture and the percentage of time that should be spent on these activities.
3. Identify the activities that vocational agriculture teachers actually participated in during the summer and the percentage of time expended on each activity.
4. Determine if differences existed between the percentage of time that vocational agriculture teachers felt should be spent and the percentage of time that was actually spent on the identified activities during the summer.

5. Determine if relationships existed between selected program/demographic variables and the percentage of time actually spent on selected activities or groups of activities.

Implications

Accountability of the summer program in vocational agriculture is a major priority of teachers having 12-month programs. These teachers must be continually on the alert to maintain the time they have available for their students (Cepica & Stockton, 1980; Luft, 1976). The results of this study should help teachers plan, implement and publicize their summer program. Plunging into the summer and its many activities can be a disaster without first looking at the number of days available, the activities that must be attended and the number of students that must be visited. This study examined 38 separate activities, all of which might have been important, to determine if they were priority items that should have been allotted time in the summer schedule. Teachers with the best intentions can get side-tracked from their well laid plans during the summer if some one has not alerted them to the problems. A teacher who has looked at the results of this study and other information on summer program activities, has planned his or her program taking into account the time and importance of an activity and then carries out the plan

while visible to the community, should have no problem being accountable for an extended contract of any length (Blezek, 1977).

Limitations

Several factors may have influenced the results of this study. They included:

1. The Agricultural Teachers Directory (1982) was used as the source of the population data. Since there was no way to know who would be resigning or changing jobs during the summer, a completely accurate frame was not available, or reasonably possible.
2. A large sample was chosen to compensate for the anticipated high rate of those declining to help with the study. This could effect the generalizability of the results.
3. Some respondents returned two or three bi-weekly summaries at one time. These may have been less accurate than those received on the bi-weekly schedule if the teacher did not complete them on a bi-weekly basis while the information was readily available and fresh.
4. Regional differences in vocational agriculture program terminology used in the instrument may have influenced the way teachers responded to the questionnaires.

Definition of Terms

Cooperative Work Program--an organized program of instruction in an occupational field designed to provide supervised on-the-job training and related instruction (Knebel & Richardson, 1982).

Extended Contract--contract for teachers' employment beyond the regular school year or teachers' employment.

Future Farmers of America (FFA)--a national organization for students of vocational agriculture (Knebel & Richardson, 1982).

State Summer Teachers' Conference--conferences and conventions for professional improvement and association business. Coordinated by state vocational agriculture teachers association and/or state departments of education.

Summer Program--vocational agriculture activities in addition to the regular school year (Phipps, 1980).

Washington Leadership Conference--a week long program during the summer offered by the National FFA organization for FFA Chapter officers, members and their advisors in the Washington, DC area (now referred to as the Washington Conference Program).

Chapter II

REVIEW OF LITERATURE

Year-Round Education

Originally, in our infant country, school year length was determined by the townspeople on the basis of several factors: size of the town, gender of the students, and whether or not the community was agrarian (Cohen, 1974). The trend in the 1600's and 1700's was toward a 12-month school year whenever that was a feasible arrangement.

In 1645 the Dorchester, Massachusetts grammar school was held year-round while a 1690 Connecticut law dictated at least six months of school in order for towns to avoid a fine (Cohen,1974).

The town of Boston in 1789 required that boys attend classes year round while girls attended only from April to October. While Massachusetts state law of the same year mandated that towns of 50 families operate school for six months while towns of at least 100 families open their schools for 12 months (Cohen, 1974).

In the 1800's, rural school calendars were dictated by the agricultural calendar. The schools were closed from spring to mid-fall, while urban schools during the same years operated 48 weeks or more. Chicago, Boston, Cleveland, Buffalo and Detroit

would operate 12 weeks of school alternating with one week of vacation year-round (Shepard & Baker, 1977).

Directly after the Civil War there was a trend in the urban areas toward vacation or summer schools of a recreational nature. With the turn of the century, the summer schools shifted to more academic and vocational coursework such as shoemaking, chaircaning, and nursing (Shepard & Baker, 1977).

By World War I the nine-month school year was the norm. Rural and urban communities worked to establish a compatible schedule from 1900 until the 1940's. Due to migration to the cities and an increased birth rate, interest in year-round schools was once again spawned in large cities after World War I. This interest waned with the onset of the depression of the 1930's (Shepard & Baker, 1977).

The year-round programs or summer schools that did exist were varied to meet the needs of the populations they served. For example, Newark, New Jersey conducted an optional summer school for the large immigrant population in 1912 (Shepard & Baker, 1977).

The norm of a nine-month school year of the early 1900's was challenged in the 1950's in response to an acute teacher shortage and the post-World War II "baby boom". Once again, large city schools operated year-round. There were not enough schools or teachers to serve all the elementary and secondary students.

They had a choice of building more schools very quickly or scheduling students throughout the year. These programs broke the school year up into three or four sections, with students rotating in and out for different portions of the year. The teachers were employed for the entire year (Shepard & Baker, 1977; Rehage, 1957).

Another option, suggested by Wyman (1957), was a combination of short student days and a long year with two shifts of students. This could help to eliminate the teacher shortage.

Numerous studies throughout the 1950-1970's uncovered problems that outweighed the possible financial savings from year-round schools. These included curriculum, scheduling, and teacher satisfaction. Advantages of year-round schools had also been hypothesized. They included a decrease in summer learning loss and disciplinary problems (Shepard & Baker, 1977).

Many school districts tested students to determine if year-round schools affected student achievement. Nygard (1974) reported no conclusive results from studies in Prince William County, Virginia; Becky-David School in Missouri; Chula Vista, California schools; and Valley View School District in Illinois.

In Colorado Springs it was noted that after two years of year-round schools, grades 1-3 showed higher scores overall, while grades 4-6 showed no difference. A Northville, Michigan study

showed that after two years students scored much higher on reading and math for all achievement levels (Shepard & Baker, 1977). Massie (1977) reported fewer student failures and an increased benefit for academic achievement. Other studies reviewed by Shepard and Baker (1977) gave few conclusive results.

Some communities considered the year-round scheduling, but as Ames (1969) reported of the Germantown, Wisconsin district, rejected it for several reasons. They included family vacations, summer school for teachers, summer camp for children and summer building repairs.

Massie's 1977 study of 79 extended-school year (ESY) programs found that, although there was a benefit to academic achievement, a financial savings was not likely to accrue. In a related study, Senoff and Reid (1975) compared Phoenix and Virginia Beach programs, showing a savings in student space costs of $20.78 per student but an increase in cost for staff by $40.23 per student. A 1983 report by Beelke on Oxnard, California schools reported that their schools could educate 900 students more efficiently with year-round education than 700 students with the traditional school year. A reduction in teacher illness days by 1.27 days per teacher, less unexcused student absences (1.3% as compared to 2.5%), and a reduction in vandalism by two-thirds in two years were also reported by Beelke.

In response to the need for educational effectiveness the California State Department of Education (1975) created a handbook for year-round education. Several advantages of year-round education were discussed. They included: enhancement of a district's overall effectiveness; a more effective use of facilities and resources; contribution to life-long learning; a more humane approach to personalized student needs; a contribution to the expansion of the learning process; making better use of student and teacher time; and less truancy, vandalism, boredom and discipline problems.

In addition to California's handbook, Ross (1975) drafted a legislator's guide to enable legislators to understand the concept of the year-round school. He established his position for the year-round program by pointing out that we still send children to school based on agricultural work habits, while only three percent of the population are now involved in the production of food and fiber.

Ross stated that the short vacation of the year-round school minimizes the learning loss that occurs over a three-month summer vacation. He further reported that the "... knowledge explosion points up the need for increased vocational training and the recognition of a need for purposeful use of free time" (p.5).

The year-round school, according to Ross, is where individualization of instruction becomes meaningful and where flexibility becomes a powerful factor in the learning process.

A more recent report by Massie (1977) studied 79 extended-school year programs nationwide. Six conclusions he made, based on the returned questionnaires, are as follows:

1. men and heads of households prefer extended school year (ESY) programs
2. ESY attendance did not have a detrimental effect on students
3. ESY did have a positive influence on dropouts
4. ESY was not negative to attendance
5. there were fewer student failures and an increased benefit was present for academic achievement
6. a financial savings for the school district was not likely to accrue

It was added that the pros and cons of year-round schools have been debated for 75 years and more and will continue to be the focus of discussion when efficiency of education is the issue.

In a report on year-round high schools in 1981, Mussatti reported that 16 states convened a total of 336 year-round schools, most of those being elementary (284). The highest rated problems of the year-round schools were curriculum sequencing and

planning, facility maintenance and cleaning, and cost per student. The number one inconvenience was that of vacation planning.

In summary, until recently, year-round school was engaged in usually for physical and personnel reasons. Atlanta and other cities are now using year-round schools as a means of improving the quality of the curriculum as opposed to a means of saving tax dollars (Shepard & Baker, 1977).

Year-Round Program of Vocational Agriculture

The two primary reasons for conducting the 12-month program of vocational agriculture are neither physical or related to personnel but educative and legislative. Prosser's 16 theorems of vocational education included one that specifically addressed the environment in which the learner is best trained. It should be as nearly as possible a replica of the environment in which he must subsequently work (Prosser & Quigley, 1949). The summer, then, is certainly the best time for teaching many skills in agriculture that occur only or primarily in the Summer (Briers, 1983).

This theorem was recognized as a necessity and written into the Smith-Hughes Act. According to the official interpretation of the Smith-Hughes Act of 1917 by the Federal Board of Vocational Education in Bulletin Number 13 (1918) each school offering vocational agricultural should employ a qualified teacher for 12 months. The teacher was to be available during the growing season

when the students and their home projects were underway and in need of supervision.

Since the establishment of Stimson's home project method in 1908 (Moore, 1985) and the passage of the Smith Hughes Act in 1917, the majority of programs of vocational agriculture in the public schools have been conducted on a year-round basis.

Attitudes Concerning Summer Programs of Vocational Agriculture

Attitudes of administrators, teachers, students, employers and parents towards summer programs of vocational agriculture have been studied by numerous researchers.

Gardner (1961) found that 53.2 percent of the Idaho administrators surveyed believed that the summer program of vocational agriculture did justify employment of the teachers, while 27 percent said the summer program did not justify 12-month employment. He also found that the positive attitude of the administrators toward the 12-month contract increased as the years of experience an administrator had with vocational agriculture programs increased.

A similar study by Warfield (1966) showed that 61.5 percent of the 126 Washington superintendents surveyed were against 12-month employment as justified by the summer program, while 23.1 percent were in favor. Warfield also reported that many of these administrators felt that 10- or 11-month contracts were sufficient to do the job required of the teachers.

Noland's New Mexico study of teachers, administrators and students from 68 vocational agriculture departments, revealed that summer programs and extended contracts for teachers seemed to be a justified expenditure of funds (1973). Teachers indicated that they were involved with vocational agriculture activities an average of 67.5 days during the summer. Both the teachers and administrators in this study agreed that supervision of students' occupational experience programs required the greatest portion of the teacher's time. Students surveyed in Noland's study, with 93 percent responding, agreed that the summer program was very important.

In Cepica's (1977) Oklahoma study, importance of the summer program as seen by the 345 participating teachers was reported and is summarized in Table 1. Note that 93 percent of the teachers saw the summer program as having "much" or "great" importance.

Administrators that the researcher had identified as being supervisors of "superior" program teachers were polled in the same study on the amount of emphasis that they felt should be placed on the summer program in relation to the total program. Sixteen of the administrators favored "great emphasis" while 27 indicated that "much emphasis" was needed, and only nine believed that "some, little or no emphasis" should be placed on the summer program. The administrators did not seem to be as positive about the summer program as the teachers. Cepica did not survey the

administrators of those teachers, identified by the state agricultural education supervisors, as coming from less than "superior" programs.

Table 1

Importance of the Summer Program in Relation to the Total Program of Vocational Agriculture As Perceived by Teachers, Cepica (1977)

Importance	n	%
Great	194	56.2
Much	127	36.8
Some	22	6.4
Little	2	.6
No importance	0	0.0
Total	345	100.0

Perceptions of Iowa's vocational agriculture instructors and superintendents were measured by Hilton (1979) with a three-part questionnaire. The 156 teachers and superintendents agreed upon the importance of the summer program with the teachers rating it at 12.09 on a 16 point expanded scale and the superintendents an 11.92 on the same transformed scale. They continued in agreement that SOEP and FFA activities are the backbone of a successful

program of activities. Structured teaching activities were not considered to be a part of a summer program by both groups in this Iowa study.

Holmes' (1979) study of Florida vocational agriculture teachers and their principals in comprehensive secondary schools, revealed that they rated a list of 63 summer activities high enough (greater than 11 on a transformed 16 point scale) to indicate a need for year-round vocational agriculture programs.

A sub-committee of the Research Committee of the Agricultural Education Division of the American Vocational Association (AVA) (Stewart, 1979) was asked to examine information about 12-month programs. The sub-committee's report states that "... there is a need to emphasize the supervised occupational experience phase of our programs when planning summer activities. There is a belief that a relationship exists between the effectiveness of programs of vocational agriculture and the extent to which the programs were conducted over a 12-month period, and effectiveness in these cases might be determined by a rating of the performance of students, ... , on a rating scale by supervisors in the state offices or by other teachers." (p.269) The committee summarized by stating that there is a need for extended contracts for a complete program of vocational agriculture.

A 1979 Texas study by Cepica (similar to his Oklahoma project) examined teacher and administrator perceptions of summer program importance. Seventy-three percent of the teacher group rated the program as "extremely" important while sixty percent of the administrators rated the summer program as being either "very" or "extremely" important to the total program of vocational agriculture.

Miller and Parks surveyed Ohio horticulture and agricultural equipment and mechanics advisory committee members at two combined committee meetings concerning the merit of summer programs in their respective taxonomies. Summer experience was indicated as "essential" to 69 of 264 (26.1%) duty/task categories in horticulture and to 76 of 572 (13.3%) duty/task statements in agricultural equipment and mechanics. When summer experience as "essential" and "best" (time for learning a duty/task) were combined, numbers rose to 35.6 percent of the horticulture tasks and 51.2 percent of the agricultural equipment and mechanics tasks being included.

A composite paper reported the perceptions of North Dakota administrators and vocational agriculture teachers toward SOEP's. Both groups agreed that SOEP's should be supervised during the summer months as well as when school is in regular session and necessitated an extended summer contract for the North Dakota teachers (Priebe, Granzen, and Willardson, 1982).

Willingness of these North Dakota administrators to support selected aspects of SOEP's was also surveyed. Administrators were modestly willing to support employing vocational agriculture teachers on a 12-month contract (3.68 on a 5 point scale). They were slightly less willing to support the idea of providing teachers with adequate time to schedule at least three out-of-school SOEP visits/conferences per student per year.

Finally, in an Ohio study of summer horticulture programs, Watkins (1983) surveyed students, parents, employers and school administrators. All groups questioned felt that the summer program was important, with the employers believing it to be a necessity. Both the parents and employers felt that summer programs should be continued even if state and federal funds were withdrawn for this segment of the program.

Students and parents of this Ohio study saw moral support and encouragement as the number one benefit of summer programs. Employers felt that help in dealing with job related problems was the most important benefit that students received while administrators placed one-to-one instruction as number one.

Opinions and perceptions varied throughout the studies but positive attitudes toward summer programs were consistent when the programs focused on working directly with students, both high school and adult.

Summer Activities in Vocational Agriculture

Several research reports addressed the general types and specific activities that should be part of a vocational agriculture teacher's summer employment. Amount of time to be spent on activities was either reported as days or as a percentage of time of the summer contract.

Table 2 outlines seven studies from 1959-1983 that allotted percentage of time or number of days to summer activities. Studies included in the table are:

1. Guiler's 1959 Ohio study of the actual activities of 320 vocational agriculture teachers
2. Bradley's 1960 report of Kansas vocational agriculture teachers' and his own recommendations for summer activities
3. Harzman's 1963 study of 51 Kansas vocational agriculture teachers and time devoted to activities
4. Strong's 5-year study (1973) of 30 vocational agriculture teachers in Idaho and the time spent on activities
5. Noland's 1973 report of New Mexico teachers' and administrators' perceptions of what time should be spent on activities
6. Holmes' 1977 study of the perceptions of Florida vocational agriculture teachers and their principals

Table 2

Summary of Literature on Vocational Agriculture Program Summer Activities Reported as Percentage of Time

Activities	Studies				
	Guiler 1959	Bradley 1960		Harzman 1963	Strong 1973
		Teachers	Self		
SOEP	-	19.0	24.0	22.7	16.0
FFA	17.0	10.0	8.0	-	16.6
In-service	18.0	20.0	14.0	18.7	11.6
Fairs/shows	8.8	-	-	-	-
Public relations/ community service	2.8	12.0	8.0	-	7.4
Adult farmers	4.4	-	-	-	.4
Reports/office work	4.2	-	-	8.0	2.6
Instruction at school farm	11.7	-	-	-	1.8
Maintenance	7.7	-	20.0	9.3	17.5
Program preparation and planning	6.1	-	-	30.4	13.2
Vacation	15.9	-	-	-	-
Maintenance & program planning	-	25.0	-	-	-
Student conferences	2.2	-	-	-	-
Out-of-school program	-	9.0	16.0	-	-
Other	-	5.0	10.0	20.2	11.1

Table 2 (continued)

Summary of Literature on Vocational Agriculture Program Summer Activities Reported as Percentage of Time

Activities	Studies: Noland 1973 Teachers	Noland 1973 Admin.	Holmes 1977	Hilton 1983
SOEP	30.5	25.0	19.6	21.4
FFA	8.7	14.3	12.2	16.2
In-service	10.6	9.8	18.4	9.2
Fairs/shows	-	-	-	-
Public relations/ community service	3.4	6.3	-	9.3
Adult farmers	-	-	-	-
Reports/office work	-	-	-	-
Instruction at school farm	-	-	-	-
Maintenance	15.4	12.0	-	-
Program preparation and planning	15.4	13.1	49.8	44.0
Vacation	9.9	10.5	-	-
Maintenance & program planning	-	-	-	-
Student conferences	6.1	8.0	-	-
Out-of-school program	-	-	-	-
Other	-	-	-	-

Note. In some cases results have been combined into broad categories to simplify presentation. All results are expressed as a percentage of summer time allotted to an activity.

7. Hilton's 1983 combined report of Iowa and Pennsylvania vocational agriculture teachers' perceptions of time that teachers spent on summer activities.

Activities consistently allotted large percentages of time were SOEP and in-service. Only Guiler's study did not mention SOEP as a separate category or activity for the summer program. FFA was allotted from 8% (Bradley, self, 1960) to 20% (Bradley, teachers, 1960) of the summer by six of the seven reports.

Table 3 gives numerical rankings of importance for activities from two different reports. These studies include:

1. Cepica'a 1979 report of Texas vocational agriculture teachers, superintendents, state supervisors and teacher educators
2. Hiltons's 1979 study of Iowa vocational agriculture teachers and superintendents.

Several authors in addition to those listed above addressed the activities conducted or to be conducted in vocational agriculture summer programs. Phipps (1959) stressed the importance of serving adults, in addition to the high school students, during the summer. This he claimed, was an ideal time since there is more time for preparation and the psychological effect is the most positive for the adult students.

In 1960, Haslick and Langdon found that Michigan vocational agriculture teachers were spending 43 percent of their time during

Table 3

Rankings of Importance of Vocational Agriculture Summer Program Activities

	Studies				
	Cepica, 1979			Hilton, 1979	
Activity	Teacher	Adm.	TE/SS	Supt.	Teacher
SOEP	1	2	1	1	3
FFA	2	7	6	2.5	2
Visit prospective students	3	6	4	-	-
Program planning	4	1	2	5	5
Public relations	5	5	5	8	4
Prof. improvement	6	4	8	6	1
Facilities & equipment	7	3	7	-	-
Adult/young farmers	8	8	3	-	-
Records & reports	9	9	9	4	6
Resource improvement	-	-	-	2.5	7
Teaching	-	-	-	7	8

Note. Adm. = administrators; TE/SS = teacher educators/state supervisors; Supt. = superintendents.

the summer for supervisory farm visits. This was almost twice as much time as was recommended by Bradley.

Of 36 summer activities, the following ten were found to be "very important" by 111 administrators of vocational agriculture teachers in Idaho (Gardner, 1961):

1. revising or preparing course of study materials
2. preparing curriculum for the coming year
3. building or reconditioning tools or equipment
4. securing reference materials for class
5. attending professional meetings
6. acquainting administrators with the progress of the vo-ag program
7. reading professional journals
8. making regular supervisory calls
9. contacting prospective students
10. preparing news items for local and state paper

Those activities considered to be important by the same 111 Idaho administrators included:

1. ordering needed supplies and equipment
2. attendance at summer school
3. meetings with extension groups
4. planning FFA meetings
5. holding FFA meetings

6. participating in FFA district contests

7. holding regular conferences with school administrators

A Wisconsin study by Koene (1963) showed that 50 percent of vocational agriculture teachers' summer employment was spent on farm visits. This was the greatest amount of time allotted to farm visits in any study reviewed.

A study of 126 Washington state administrators for vocational agriculture programs (similar to Gardner's 1961 report) indicated the perceived importance of specific summer activities (Warfield, 1966). Seven activities out of 40 rated as "very important" by the administrators were:

1. on-farm project supervision
2. assist boys in selecting projects
3. state and local reports
4. help students prepare livestock and crop exhibits
5. attend vo-ag teacher training conference
6. attend professional meetings
7. read professional material

Six summer activities were rated as "important" by the same Washington administrators. They were:

1. revise course of study
2. collect teaching materials and specimens
3. repair tools and equipment
4. plan and assist with community activities

5. have conferences with administrators
6. learn new farm and shop skills

It is interesting to note that the Washington administrators rated 23 of the 40 activities as having "no importance". The activities given a "no importance" rating but considered important in other studies were:

1. conduct project tours
2. contact prospective students
3. supervise FFA meetings
4. attend FFA contests
5. supervise FFA activities dealing with community service and recreation
6. supervise FFA farm activities on land owned by the school
7. appear on TV and radio
8. attend summer school
9. conduct demonstration plots

A policy bulletin of the Wyoming Department of Education (1967) did not agree with the activities of "no importance" from the Washington state study. The bulletin states "To carry out a complete and efficient program of Vocational Agriculture it is necessary to conduct certain activities during the summer months." (p.5) The activities listed that contradicted the Washington report were:

1. work with townspeople
2. visit SOEP's
3. make community survey
4. develop annual and long-time teaching plan
5. write article for paper
6. field tours
7. take pictures
8. make and collect visual aids
9. budget and request equipment and supplies
10. file
11. complete monthly reports
12. encourage students to show
13. FFA chapter meetings
14. professional improvement
15. arrangement for fall judging trips

In an effort to determine what time was spent on, and what it should be spent on during the summer, Noland (1973) surveyed 75 vocational agriculture teachers, 68 administrators, 68 FFA chapter Presidents and 68 FFA chapter Secretaries from New Mexico schools to garner their opinions. The two chapter officers from each program were asked to rank normal summer activities according to the amount of time they believed their teachers spent on each activity. Their ranking of activities was as follows:

1. helping students with SOEP
2. learning more about teaching and agriculture
3. preparing instructional materials
4. supervising FFA activities
5. repairing and improving shop equipment
6. taking vacation

The students also ranked activities based on their importance in improvement of the summer program. Their rankings are listed below in order of importance.

1. spend more time working with students in their farming or work experience program
2. devote more time to FFA activities
3. devote more time to improving the shop and repairing equipment
4. devote more time to planning the instructional program
5. visit more with the community leaders
6. devote more time going to conferences and meetings to become a better informed teacher

Fifty Montana vocational agriculture teachers and their administrators were surveyed concerning the status of and opinions toward summer programs in vocational agriculture (Amberson and Lantis, 1976). Eighty percent of the vocational agriculture teachers were reported to be on less that a 12-month contract with 60 percent being employed for at least 11 months.

The Montana vocational agriculture teachers reported spending 35 percent of their time on SOEP related activities, 16.5 percent of the time on program planning activities and 16 percent on professional improvement.

Four activities were rated as the most important by these same teachers. They were: holding FFA meetings, reviewing and up-dating course content, attending professional meetings and making supervisory visits.

The Montana administrators rated "efficient and adequate management of the vocational agriculture program by the teacher" as the most important activity in the overall program.

A survey of vocational agriculture teachers during the 1977 Oregon summer conference showed that those teachers spent, on the average, two hours more per week working in the summer than during the regular school year (Noel, 1978).

Noel reported that during the summer 30 percent of the vocational agriculture teachers' professional time was spent on project supervision, 13 percent on county fairs and 11 percent on the FFA. These teachers spent over one-half of their summer outside of the classroom.

Holmes' 1977 study of vocational agriculture teachers and their principals in Florida listed those activities rated by both groups as being in the upper quartile of 63 specific summer activities. They included:

1. supervise land laboratory and/or school farm
2. evaluate programs
3. care for plants in school greenhouses
4. inventory and order instructional materials and supplies
5. attend professional in-service workshops
6. organize classroom and laboratory facilities
7. visit and evaluate student SOEP's
8. inventory vocational agriculture equipment
9. meet with school administrators
10. revise curriculum content
11. revise course content
12. repair instructional tools and equipment
13. contact employers of students for feedback on student and program needs
14. attend state and/or regional professional meetings
15. attend in-service workshops and/or credit courses on technical agriculture subject matter
16. accompany chapter members to leadership camp

A sub-committee of the Research Committee, Agricultural Education Division, AVA, identified activities that were appropriate for vocational agriculture teachers during the summer (AVA, 1977). These activities focused primarily on supervision of occupational experience programs and coordination of FFA activities. They included scheduling time:

1. to provide the supervision and guidance to insure that the learning activities of the SOEP are coordinated, meaningful and accurate
2. for FFA chapter meetings
3. for district, state and national FFA leadership and training activities
4. for supervision of students engaged in exhibiting mechanics, crops or livestock projects at district and state fairs
5. to follow-up the three-year and five-year former students
6. to work with the local advisory committee on expansion and/or update of the program
7. to up-date course of study
8. for collection of teaching materials available only in the summer months

It was emphasized that all students should be involved in a balanced summer program.

In the Handbook on Agricultural Education in Public Schools (4th Ed.), Phipps listed 32 possible activities for a vocational agriculture teacher in any situation or community (1980). Specific activities that Phipps listed but have not been included in other reports were:

1. organize and supervise pre-vocational programs for prospective high school students

2. plan a picnic for all present and prospective students
3. become acquainted with persons interested in agricultural education
4. cooperate with local organizations
5. make monthly reports to superintendent and school board showing accomplishments
6. send reports to state board for vocational education
7. prepare a spot map indicating location of present and prospective students
8. take pictures of SOEP and FFA activities
9. evaluation of the objectives of the summer program

In addition to this list he emphasizes the need to develop a schedule for the summer and submit it to the advisory council, school board, superintendent, state supervisor and those who may have helped to develop the summer plans.

In a colloquium paper, Witt (1982) reported the perceptions of vocational agriculture teachers and their superintendents in North Dakota. Curriculum development and public relations were unanimously selected by the superintendents as activities that must be participated in by vocational agriculture teachers in the summer. The activity ranked lowest by the superintendents was the Washington Conference Program for FFA members.

According to the North Dakota vocational agriculture teachers, SOEP visits accounted for the largest amount of time

spent. Over 67 percent of the teachers felt that no time should be spent on summer school. The state FFA convention was ranked as the most important activity in which to participate. The two groups agreed on four of the top five and on the four least important summer activities. State FFA convention, SOEP visits, shop improvements and maintenance, and curriculum development were rated at the top. The state FFA horse judging contest and practice for it, Washington Conference Program, range camps, and summer school for high school students ranked at the bottom of the 22 listed activities.

Relationship of Summer Programs to the Vocational Agriculture Program

Only one study was identified that examined a relationship between the summer portion and the total vocational agriculture program while two others reported on the relationships between contract length and the scope of student SOEP, FFA membership and FFA chapter activity level. Ford (1970) examined all vocational agriculture departments in Iowa where no teacher change occurred during the summer of 1969. Summer programs and the total program were rated on a scale of one through five. Seventy-three percent of the departments that were rated highest on summer programs were also rated highest on the total program. Almost 90 percent of the lowest rated summer program departments were also rated lowest on total program effectiveness.

As the summer program rating increased, the enrollments of day and adult students increased. The top 40 percent of the departments made almost twice as many farm visits as did the bottom 40 percent and the number of state farmer degree recipients increased with the number of farm visits. This may be related to the increase in enrollment seen with an increased rating.

As the summer program rating increased, these eight items also increased:

1. number of contestants
2. number of teams
3. number of state farmers
4. number of show exhibitors
5. placement dollars
6. number of news items and public relations
7. number of public speaking contestants
8. number of field trips
9. number of state fair exhibitors

Those departments rated five as compared to those with a one rating had six times as many Iowa farmers, twice as many public speakers, twice as many judging teams, twice as many field trips, twice as many show exhibitors, seven times as many state fair exhibitors, three times as many students placed in agri-business, two and one-half times as many public relation activities and over

twice as much wealth added to the community's economy ($13,601/year as compared to $33,058/year).

Two studies addressed relationship of vocational agriculture teachers' contract length to other program variables. Cooper and Nelson (1981) revealed that teachers on an 11- or 12-month contracts were slightly more likely to have an FFA chapter than those teachers on a 9- or 10-month contract. Even though this was the case they reported that there was no evidence that changes in contract length were related to changes in FFA membership. Fifty-one percent of the teachers in their study were on 12-month contracts and an additional 20 percent were employed for 11 months.

Arrington (1981) in an ex post facto study identified a positive significant relationship between Florida vocational agriculture teachers' contract length and the scope of the student SOEP (r=.663). He also reported a positive significant relationship between length of teachers' contract and the FFA chapter activity level (r=.54) and that no FFA chapters having an advisor with a 12-month contract were in the lower quartile based on FFA chapter activity score.

Accountability

Summer employment accountability in vocational agriculture was the topic of numerous articles and position papers over the last fifty years. Knight reported that 162 articles concerning

summer programs were published in the Agricultural Education Magazine from 1929 to 1984 (1984). Most of the authors agreed that to maintain the vocational agriculture teacher's summer or 12-month contract it is necessary to plan the summer and its activities, include all students, focus on those activities which are peculiar to the summer months, be visible to administrators and the community, and report to administrators and the community on the summer accomplishments. It was agreed that the summer program was and is necessary but that each vocational agriculture teacher had to convince their administration and school board that what was being accomplished during the summer was worth the extra money that the school district expended for the program (Barney, 1976; Bradley, 1973; DeBoer, 1977; Johnson and Gray, 1969; McClay, 1976; Miller, 1983b; Mokma, 1972; and Muncrief, 1976).

Summary

The review of literature covered several areas related to year-round education and in particular the summer program of vocational agriculture. Numerous articles and studies addressed perceptions of teachers, administrators, state supervisors and others concerning the appropriate activities for the summer program. A number of other studies reported what was actually done by teachers during the summer. Only one study showed a relationship between the quality of the summer program and the quality of the entire program of vocational agriculture. One

study specifically addressed the merit of the summer program in horticulture and agricultural mechanics programs as perceived by advisory committee members. Accountability of the summer program teacher was the subject of numerous articles in the Agricultural Education Magazine year after year.

Most studies reviewed involved perceptions of those involved in summer programs of vocational agriculture. One early study actually used teachers as recorders of what was taking place during the summer (Guiler, 1959). It did not matter about perceptions. What actually occurred was what was to be reported to the researcher. None of the studies reported on the activities or perceptions of more than one state and its vocational agriculture personnel and students, although one researcher did combine the results of two separate state studies to write one paper (Hilton, 1983).

Activities to be completed were ranked according to importance by teachers, administrators and students. Studies ranged from the use of eight very broad, general categories to the used of 63 specific summer activities.

Agreement was seen with one activity in particular. Supervision of occupational experience programs was almost always rated as number one in importance and/or time spent (or to be spent) by the vocational agriculture teacher. Other activities that were usually ranked high were program planning, professional improvement and FFA.

None of the studies compared the amount of time that teachers perceived should be spent with the amount of time they actually spent.

Two studies reported after the data were collected for this study dealt with attitudes and perceptions of vocational agriculture teachers. Similane and Lawrence (1985) reported on the belief that that the teacher should "use summer months primarily for supervision of student experience programs". The mean rating on a 4 point scale was 3.54 for the teachers and 3.32 for their administrators. They also rated "how well done" this was and rated it 2.86 (teachers) and 2.79 (administrators).

Short and Miller surveyed Ohio vocational agriculture teachers concerning 41 statements related to summer programs. The highest rated statements on a 4 point scale included:

1. A teacher should provide individualized instruction and supervision of student SOEP's during the summer (3.62).
2. A teacher should visit each prospective student during the summer to discuss the vocational agriculture program (3.58).
3. Technical in-service workshops like "Technical Update" or those provided by other teachers or the Cooperative Extension Service are worthwhile activities for a teacher to attend in the summer (3.57).

They also reported that the attitude of teachers was positively correlated to the number of weeks of the extended contract (r=.27) and negatively related to the number of hours per week worked on an additional summer job (r=-.27). They determined attitude ratings by taxonomy and found that the three highest were farm management (3.39), production agriculture (3.14) and horticulture (3.13). The taxonomies with the lowest attitude rating were animal production and care (2.88) and agricultural industrial equipment and services (2.88).

Chapter III

METHODOLOGY

A descriptive study of vocational agriculture summer programs in the United States was scheduled for the spring and summer of 1983.

The review of literature preceding the design of the study was conducted in two parts. A letter was mailed to all head teacher educators in vocational agriculture asking for information on any research, published or unpublished, regarding summer programs of vocational agriculture in their states (Appendix A). In addition, a computer search of Educational Resources Information Center (ERIC) and Dissertation Abstracts was completed.

Population and Sample

Data were collected from two populations for this study. The first population and sample included all head state supervisors of agricultural education in the United States. Information concerning all vocational agriculture programs in the United States was requested from this population.

The second population included all vocational agriculture teachers in the United States. The 12,496 persons in the population of vocational agriculture teachers in the United States (Miller, 1983a) were the basis for a sample size of 173 that was calculated using Cochran's sample size formula (Snedecor & Cochran,

1980). Because the researcher anticipated that as few as 40-50% of the teachers in the sample would agree to take the considerable time necessary to participate in the study, a systematic random sample of 397 was selected, using the Agriculture Teachers Directory, 1982 edition (1982), to insure that a minimum response of 173 was secured. This was accomplished by selecting a random starting point and selecting every 31st name thereafter.

A personalized letter asking for help with the study along with a personalized return postcard was mailed to the sample in early-March (Appendix B). A second personalized letter and personalized return postcard was mailed to non-respondents followed by one phone call to the remaining non-respondents.

Of 397 requests for help with the summer long project, 227 (57.2%) agreed to help, 4 (1%) were returned as undeliverable, 40 (10.1%) were no longer employed as vocational agriculture teachers, 24 (6%) had no summer program, 1 (.25%) was only a part-time agriculture teacher, 3 (.75%) were going to attend graduate school, 6 (1.5%) were strictly adult instructors, 3 (.75%) worked only one week for shop maintenance, 3 (.75%) would not help because of previous plans, 38 (9.8%) gave no reasons for declining to help, and 48 (12.1%) could not be contacted after three efforts.

Instrumentation

Three instruments were developed for use in the study after reviewing the literature and determining the intended purpose of each of the three questionnaires. The first was a two-page questionnaire to be mailed to all 50 state directors of vocational agricultural education programs in the United States and solicited information including: types and numbers of secondary programs, number of teachers, base salary, method for determining and length of teachers' contracts, types of summer activities at the state level and recordkeeping requirements for the summer program (Appendix C). This questionnaire was developed for two reasons, first to gather information that would be used in analyzing other data and to aid in the development of the second questionnaire.

The second instrument was a three-page questionnaire designed to obtain program and teacher descriptions and to identify activities that teachers believed should be a part of all summer programs and the percentage of the summer that should be spent on each activity. Activities found in the review of literature were compiled, combined, and then refined into a list that attempted to include all activities that the vocational agriculture teacher might encounter during the summer. No attempt was made to delete items that the researcher felt should not be part of the summer program.

A draft was completed and mailed to 10 vocational agriculture teachers (not in the 397) selected at random for validation purposes. A letter (Appendix D) asking for the teachers' help in field testing the instrument accompanied the questionnaire. Seven instruments were returned with no major problems indicated. The questionnaires were completed by the respondents as designed and only a few minor changes were necessary.

The third instrument was a one-page summary sheet of all 38 activities that were addressed on the second questionnaire. Teachers were asked to report the amount of time they actually spent on each activity. In an attempt to increase accuracy of the teachers reporting for the third questionnaire (summary sheet), the researcher decided on the use of a bi-weekly summary sheet (Appendix E). This would allow the teachers to report the data while it was still fresh even if they were not accustomed to keeping a daily log of their summer. Depending on the length of contract and the timing of vacations the teachers were expected to use from one to seven summary sheets to be mailed to the researcher every other Friday.

Data Collection

In early March the state supervisor questionnaire and a letter asking for help with the study (Appendix F) was mailed to the 50 state directors of vocational agriculture programs in the United

States. All 50 state directors returned their surveys after one initial mail-out and two follow-ups.

In mid-April the first teacher questionnaire (designed to collect program and teacher information and to identify the activities that should be conducted in the summer) (Appendix G) and a letter (Appendix H) reminding the teachers of their agreement to help was mailed to the sample of 227 that had agreed to help with the study. Two follow-up letters (Appendix I), a postcard and a phone call were used in an attempt to secure the return of all questionnaires. Two hundred ten (92.5% response) questionnaires were returned.

In mid-May the seven bi-weekly summary sheets with a letter of instructions (Appendix J) and seven return envelopes were mailed to the 227 teachers who had agreed to help with the study.

As summary sheets were returned through the summer, they were sorted, times per activity were summed and percentages for each activity were calculated. One additional letter (Appendix K) and one postcard were mailed to late respondents as reminders of their agreement to help. Two letters (Appendix L) that included a telephone number for a collect call to the researcher were mailed to those not responding with summary sheets by mid-way through the summer. A telephone call was made to those who had failed to respond by summer's end and the teachers were asked to summarize their entire summer on only one sheet (instead of six or seven).

The one-sheet summary results (n=37) were compared to the multiple sheet results (n=153) using Student's t-test to determine if a significant difference existed. None were detected, therefore, all data were combined for analysis. One hundred ninety (83.7% response) usable sets of summary sheets were returned by mid-September.

Data Analysis

The data were analyzed using descriptive statistics for objectives 1 through 3, the paired t-test for objective 4 to determine if significant differences existed between what should and what was actually done by 172 respondents, and Kendall's tau correlations for objective 5 to determine if any significant relationships existed between selected program/teacher variables and the percentage of time spent on selected activities or groups of activities. The SAS (Statistical Analysis System) (1982) and SPSS^{X} (1983) statistical packages were used in the data analysis.

Chapter IV

FINDINGS

The findings included in this chapter are given in order of the five objectives. The demographic material concerning teachers has been placed in Appendix M. This data was gathered not as an objective of the study but as a basis for correlational analyses.

Vocational Agriculture Programmatic Information: Objective 1

All fifty state supervisors responded to the two-page questionnaire concerning their state's programs. Numbers and types of programs varied by state. Table 4 notes the types and number of programs in 1983. As expected, almost two-thirds of the programs were production agriculture, with combined horticulture/floriculture programs being the next largest group.

Sixteen states reported having a base salary for vocational agriculture teachers. All others said salary was determined by the local school district or other entity. Contract lengths and how they are determined for each state are reported in Table 5. One-half of the states reported that contract length was determined at the local level while nine states reported mandatory 12-month contracts for all teachers.

Table 6 gives the number of states that reported conducting the statewide activities listed in the summer months. Additional activities that supervisors reported in answer to the category "Other" were contests (3 states), young farmer tours (1 state),

Table 4

Types of Vocational Agriculture Programs in the United States

Program type	Number	%
Agricultural production	6411	63.60
Agribusiness	431	4.28
Floriculture	130	1.29
Landscape horticulture	279	2.77
Combined floriculture/horticulture	862	8.55
Agricultural mechanics	604	5.99
Food/meat processing	32	.32
Natural resources/forestry	351	3.48
Animal care	79	.78
Farm management	37	.37
Turf grass/grounds maintenance	49	.49
General agriculture	48	.48
Fisheries	1	.01
Exploratory agriculture	288	2.86
Special needs	159	1.58
Rural recreation	20	.20
Fundamentals of agricultural occupations	163	1.62
Applied principles of agricultural occupations	116	1.15
Building construction	20	.20
Total	10,080	100.00

certification workshops (1 state), district meetings (2 states), vocational teacher conferences (1 state) and teacher in-service (1 state).

Table 5

Teacher Contract Length by State

Contract length	Number of states	%
Mandatory 12 months	9	18
Mandatory 11½ months	1	2
Mandatory 11 months	2	4
Mandatory 10½ months	1	2
9 months	2	4
Length determined at local level	25	50
Length depends on type of agriculture program	7	14
1 day allotted over 9 months for each student with SOEP	1	2
12 months for single teacher departments/ 11 months for each teacher in a multiple teacher department	1	2
All 11 or 12 month contracts	1	2
Total	50	100

Table 6

Statewide Summer Activities

Activity	Number of states	%
Teacher technical updates	44	88
State vocational agriculture teachers conference	43	86
Fairs/shows	34	68
FFA leadership camp	31	62
State FFA convention	26	52
Other	9	18

Contract length as reported by the 209 respondents is summarized in Table 7. The majority of the teachers reported 12-month contracts (65.65%) which allowed them the full summer for their program. It should be noted that although only nine states (18%) reported having mandatory 12-month contracts, it appears that many of the school systems in states where contract length is determined at the local level still issued 12-month contracts.

The number of teachers per department varied from one to eleven with a mean of 1.88 teachers (SD=1.42). Table 8 shows the breakdown by number of teachers per department.

Table 7

Contract Length of Vocational Agriculture Teachers

Length	Frequency	%
12-months	137	65.55
11½-months	9	4.31
11-months	32	15.31
10½-months	5	2.39
10-months	22	10.53
9½-months	2	.96
9-months	2	.96
Total	209	100.00

Teachers were asked if they farmed or engaged in other business activities to supplement their income. One hundred three (49.04%) responded "yes" while 107 (50.95%) responded "no".

Mean number of day students that the teachers were responsible for was 68.94 (n=196, SD=28.01). Only 89 teachers reported the number of adult students that he or she was responsible for. The mean number of adult students reported was 28.31 (SD=11.11). It appears that the other teachers did not have adult students.

Table 8

Number of Teachers per Vocational Agriculture Department

Number of teachers	Frequency	%
1	116	55.24
2	58	27.62
3	20	9.52
4	12	5.71
5	2	.95
7	1	.48
11	1	.48
Total	210	100.00

Summer Activities That Should be and Were Actually Performed

Objective 2: Teachers were asked if an activity should be a part of the vocational agriculture program and if so, what percentage of the summer should be allotted to the activity. The results are presented in the second and third column of Table 9. Activities indicated to be performed during the summer by the highest number of teachers were; paper work (169 teachers), visit students with SOEP's (168 teachers), and state teacher conference

Table 9

Summer Program Activities That Should Be and Were Actually Performed

Activity	Should be performed		Were performed	
	Frequency[a]	% Summer (SD)	Frequency[b]	% Summer (SD)
Paper work (reports/records)	169	3.7 (2.47)	172	6.9 (7.40)
Visit students with SOEP	168	23.3 (15.39)	163	16.2 (13.38)
Up-date curriculum/lesson plans	157	5.3 (5.25)	131	5.0 (5.10)
State teacher conference	156	4.3 (2.88)	108	8.0 (4.86)
Maintain vo-ag equipment/ facilities	149	5.8 (6.97)	149	6.8 (7.19)
FFA chapter meetings	147	2.3 (1.67)	97	1.7 (1.27)
Order supplies and equipment	145	2.8 (2.34)	137	3.7 (6.08)
Shows, fairs and/or sales	144	6.0 (5.15)	102	11.6 (12.05)
Visit incoming freshmen	134	4.9 (4.30)	76	3.3 (7.00)
Vacation (personal)	130	11.6 (8.24)	141	16.1 (8.88)
Public relations	129	3.3 (2.82)	105	3.3 (7.81)
FFA state convention	120	4.6 (2.92)	95	9.6 (9.06)
FFA leadership camp	120	4.2 (3.20)	62	8.0 (6.80)

Table 9 (continued)

Summer Program Activities That Should Be and Were Actually Performed

Activity	Should be performed		Were performed	
	Frequency[a]	% Summer (SD)	Frequency[b]	% Summer (SD)
Inventory vo-ag facilities	136	2.8 (2.31)	116	4.0 (7.19)
Meet with advisory council	113	1.7 (1.13)	47	1.3 (1.37)
Field days/trips with students	108	3.6 (3.66)	77	5.6 (6.42)
Follow-up former students	108	2.7 (1.75)	87	2.3 (2.66)
Contests	99	4.0 (3.88)	60	6.1 (8.46)
Community service	99	3.4 (4.92)	91	6.1 (12.12)
Operate school farm/greenhouse/ or other instructional lab	96	7.8 (10.92)	109	10.8 (12.26)
Visit cooperative work program students at the job site	96	6.6 (8.22)	58	4.3 (6.83)
Field days/trips w/out students	95	3.4 (4.63)	67	3.1 (2.72)
Organized/scheduled meetings with administrators	95	1.9 (1.05)	101	2.3 (1.93)
Collect samples for classroom study	91	2.9 (2.19)	59	2.1 (1.60)

Table 9 (continued)

Summer Program Activities That Should Be and Were Actually Performed

Activity	Should be performed			Were performed		
	Frequency[a]	% Summer	(SD)	Frequency[b]	% Summer	(SD)
Recruit new students	90	2.9	(2.37)	47	1.6	(1.50)
FFA chapter recreation/socials	87	2.0	(1.56)	34	2.9	(3.11)
Visit adult students	82	5.8	(8.53)	91	4.2	(4.14)
Arrange student employment sites	80	3.1	(2.51)	41	3.1	(4.85)
Open vo-ag facilities to community	59	3.6	(3.17)	55	4.8	(6.83)
University summer school	54	4.0	(3.30)	23	11.6	(9.27)
Conduct adult classes/meetings	40	3.2	(3.96)	33	6.4	(14.64)
Attend non-credit workshops	35	2.7	(2.56)	75	6.6	(5.15)
Attend regional NVATA meeting	35	2.7	(2.21)	11	8.5	(7.33)
FFA alumni meetings	28	1.5	(0.83)	15	1.4	(0.82)
Perform school maintenance (non-departmental)	24	4.7	(4.80)	66	3.2	(3.49)

Table 9 (continued)

Summer Program Activities That Should Be and Were Actually Performed

Activity	Should be performed		Were performed	
	Frequency[a]	% Summer (SD)	Frequency[b]	% Summer (SD)
Advise 4-H club	17	1.5 (.62)	31	2.0 (1.09)
Washington leadership conference	16	7.1 (16.91)	8	3.8 (4.51)
Other	17	4.2 (4.93)	75	4.9 (5.21)
Sum of all student contact activities[c]	168	52.0 (20.34)	163	40.8 (23.30)
Sum of all FFA activities[d]	147	15.8 (10.38)	102	16.8 (14.30)

Note: The "frequency" column includes those teachers who indicated that this activity was or should be performed. The "% summer" column indicates the mean percentage of the summer that teachers reported should be or was spent on this activity.

[a] $n=189$. [b] $n=190$. [c] Included 18 activities that involved student contact, including FFA activities. [d] Included seven activities that involved the FFA including "fairs, shows, and sales".

(156 teachers). Highest percentages of summer time were allotted to visiting students with SOEP's (23.3%), vacation (11.6%) and operating school farm/greenhouse/other instructional lab (7.8%). Means were caluculated using only the responses from the teachers who indicated that an activity should be performed.

Objective 3: Throughout the summer of 1983 teachers reported which activities they actually did perform and the amount of time spent on each. The number of teachers performing and the percentages of summer time spent were calculated for each activity and the results appear in the fifth and sixth columns of Table 9. Activities indicated as performed by the highest number of teachers were; paper work (172 teachers), visiting students with SOEP's (163 teachers), and maintaining vocational agriculture equipment/facilities (149 teachers). Highest percentages of summer time were spent on visiting students with SOEP's (16.2%), vacation (16.1%), shows, fairs and/or sales (11.6%) and university summer school (11.6%). Means were calculated using only the responses of those teachers that indicated that they did perform the activity.

Differences Between What Teachers Believed Should Be and What Actually Was Done During the Summer: Objective 4

Twenty significant differences between the percentage of summer time that should be and actually was allotted to activities were detected at the chosen alpha level of .05.

These results appear in Table 10. Teachers spent significantly more time than they said they should on the following activities: shows, fairs, and sales; meetings with administrators; paperwork; state FFA convention; operating the school farm, greenhouse or other instructional laboratory; performing school maintenance; vacation; attending summer teachers conference; and advising 4-H clubs. Teachers spent significantly less time than they indicated they should on the following activities: field days and/or trips without students; visiting students with SOE programs; visiting cooperative program students; visiting incoming freshmen; recruiting new students; arranging for student employment sites; collecting samples for classroom study; meeting with advisory committee; FFA chapter meetings; and FFA chapter recreation and socials.

Relationships Between Demographic Variables and the Amount of Time Spent on Different Activities: Objective 5

Table 11 gives the results of the Kendall's tau rank correlations on selected program and teacher variables and selected summer activities or groups of activities. There were five significant relationships detected at an alpha level of .05. The five relationships included; total FFA activities related positively to teachers employed outside of teaching, highest degree held related positively to organized/scheduled meetings with administrators, contract length related positively to

Table 10

Differences Between Time Allotted for Summer Program Activities That Should Be and Were Actually Performed (n=172)

Activity	Should be performed		Were performed		Paired
	% Summer	SD	% Summer	SD	t-value
Shows, fairs and/or sales	4.6	5.22	5.7	8.26	-2.07*
Contests	1.8	2.93	1.9	5.67	-.05
Field days/trips with students	2.2	3.37	2.0	4.26	.69
Field days/trips w/out students	1.8	3.87	1.0	2.18	2.84**
Visit students with SOEP	21.0	16.25	13.9	13.87	5.29**
Visit cooperative work program students at the job site	3.1	5.35	1.3	4.32	5.64**
Visit adult students	2.3	3.47	1.8	3.42	1.54
Visit incoming freshmen	3.3	3.82	1.0	1.96	4.45**
Follow-up former students	1.6	1.88	1.1	2.23	2.50*
Recruit new students	1.3	2.02	.4	1.02	5.27**
Arrange student employment sites	1.3	2.20	.7	2.69	2.49*
Organized/scheduled meetings with administrators	1.0	1.24	1.3	1.88	-1.48
Paper work (reports/records)	3.4	2.65	6.5	7.64	-5.36**

Table 10 (continued)

Differences Between Time Allotted For Summer Program Activities That Should Be and Were Actually Performed (n=172)

Activity	Should be performed % Summer	SD	Were performed % Summer	SD	Paired t-value
Inventory vo-ag facilities	2.0	2.29	2.4	6.19	-.97
Order supplies and equipment	2.1	2.33	2.8	5.68	-1.72
Collect samples for classroom study	1.3	1.94	.6	1.21	4.68**
Up-date curriculum/lesson plans	4.1	4.03	3.4	4.21	1.55
Meet with advisory council	1.1	1.22	.3	.88	6.67**
FFA chapter meetings	1.8	1.77	.8	1.29	6.52**
FFA leadership camp	2.7	3.28	2.5	5.52	.35
FFA chapter recreation/socials	.9	1.35	.5	1.46	3.12**
FFA state convention	3.1	3.55	4.8	8.30	-3.15**
FFA alumni meetings	.3	1.62	.1	.45	1.60
Conduct adult classes/meetings	.9	3.23	1.2	6.80	-.93
Public relations	2.5	3.57	1.8	6.29	1.01
Community service	2.1	4.81	3.1	9.32	-1.57

Table 10 (continued)

Differences Between Time Allotted for Summer Program Activities That Should Be and Were Actually Performed (n=172)

Activity	Should be performed % Summer	(SD)	Were performed % Summer	(SD)	Paired t-value
Operate school farm/greenhouse/ or other instructional lab	3.9	8.36	6.4	10.96	-3.20**
Open vo-ag facilities to community	1.2	2.44	1.4	4.45	-.89
Operate school farm/greenhouse/ or other instructional lab	3.9	8.36	6.4	10.96	-3.20**
Open vo-ag facilities to community	1.2	2.44	1.4	4.45	-.89
Perform school maintenance (non-departmental)	.7	2.54	1.1	2.63	-2.07*
Maintain vo-ag equipment/ facilities	4.6	6.81	5.5	7.16	-1.37
Vacation (personal)	8.1	8.84	11.7	10.28	-3.17**
University summer school	1.2	2.62	1.4	5.09	-.68
Attend non-credit workshops	2.3	2.71	2.6	4.64	-.82
Attend regional NVATA meeting	.6	1.68	.4	2.43	.49

Table 10 (continued)

Differences Between Time Allotted for Summer Program Activities That Should Be and Were Actually Performed (n=172)

Activity	Should be performed		Were performed		Paired
	% Summer	(SD)	% Summer	(SD)	t-value
State teacher conference	3.6	3.14	4.6	5.49	-2.21*
Washington leadership conference	.6	5.43	.2	1.22	1.10
Advise 4-H club	.1	.49	.3	.89	-2.99**
Other	.4	1.96	2.0	4.21	-4.53**
Sum of all student contact activities	51.8	20.10	40.1	23.46	6.94**
Sum of all FFA activities	15.6	10.2	16.7	14.32	-.97

Note. The "% summer" column indicates the mean percentage of the summer that all teachers reported should be or was spent on this activity.

*$p \leq .05$; **$p \leq .001$;

Table 11

Correlations Between Selected Variables and Percentage of Time Spent on Selected Activities

Percentage of time spent on activity	Variables			
	Highest degree held	Contract length	No. of teachers	Outside employment
Total student contact	-.0442 (187) P=.231	-.0441 (186) P=.238	.0735 (187) P=.097	.0583 (186) P=.164
Total FFA	-.0875 (187) P=.074	-.0943 (186) P=.052	.0549 (187) P=.167	.1298 (186)* P=.015*
Visit SOEP's	-.0599 (188) P=.162	-.0097 (187) P=.433	-.0510 (188) P=.186	-.0078 (187) P=.449
Meeting with admin.	.1098 (188)* P=.050*	.1279 (187)* P=.022*	-.0182 (188) P=.386	-.0988 (187) P=.068
Paperwork	.0094 (188) P=.440	-.0903 (187) P=.063	.0136 (188) P=.407	-.0312 (187) P=.305
Up-date lesson plans	.0053 (188) P=.467	-.0479 (187) P=.214	.0260 (188) P=.331	.0473 (187) P=.226
School maintenance non-vo-ag	.0430 (188) P=.263	.1236 (187)* P=.029*	-.1958 (188)* P=.001*	.0185 (187) P=.392

Note. The numerical values presented in the table represent the Kendall's tau rank correlation coefficient / n / probability.

organized/scheduled meetings with administrators, contract length related positively to performing school maintenance (non-vo-ag), and number of teachers in the department related negatively to performing school maintenance (non-vo-ag).

Those relationships may be interpreted as follows: (a) teachers who were not employed outside of teaching vocational agriculture tended to spend more summer time on FFA related activities, (b) teachers with longer teaching contracts and/or more advanced degrees were likely to spend more of the summer at organized/scheduled meetings with administrators, (c) the more teachers that were employed in the department the less likely the teacher was to perform school maintenance not related to the vocational agriculture department, and (d) the longer the teacher's contract the more likely he or she would be to spend time on school maintenance (non-vo-ag). Although the above relationships were significant at the .05 level none were practically significant (tau $\geq$ .30). This level of practical significance was used previously in agricultural education research by Arrington (1981). Kerlinger (1973) concurs with this level in saying that an $\underline{r}$ (in this case a tau) of .30 or more, that is statistically significant, should be considered and may be of help to the investigator later to find an important relation.

Additional Findings

Post hoc chi-square analyses were completed on the number of teachers that indicated that they should or should not and/or did or did not perform each activity. Table 12 shows the results of a 2 X 2 crosstabulation and the resulting chi-square value for each activity. Twenty-four significant chi-square values were detected indicating that teachers in many cases did not perform the activities as they believed they should during the summer.

The activities performed by a significantly smaller number of teachers than expected, based on what teachers thought should be done, ($p \leq .0001$) included: shows, fairs, and sales; contests; field trips with students; visiting students with SOEP's; visiting adult students; conducting adult classes; conducting inventory; operating the school farm or other laboratory; and maintaining the vo-ag facilities and equipment. The majority of these activities involved student contact. There were no activities performed by a significantly greater number of teachers than expected.

Table 12

Chi-Square Analyses of Whether Teachers Spent Time on an Activity by Whether They Should Spend Time on An Activity (n=171)

	Should be performed						Should not perform						
	Did do			Did not do			Did do			Did not do			
Activity	Obs	Exp	Cell %	Obs	Exp	Cell %	Obs	Exp	Cell %	Obs	Exp	Cell %	Chi-square
Shows, fairs and/or sales	82	68	48	46	60	27	8	22	5	34	20	20	23.95****
Contests	42	27	25	45	61	26	10	25	6	74	58	43	25.02****
Field days/trips with students	54	41	32	49	62	29	14	27	8	54	41	32	16.03****
Field days/trips w/out students	30	29	18	59	60	35	26	27	15	56	55	32	.01
Visit students with SOEP	139	131	81	15	22	9	7	15	4	10	3	6	25.74****
Visit cooperative work program students at the job site	34	27	20	55	62	32	18	25	11	64	57	37	4.58*
Visit adult students	57	37	33	21	41	12	23	44	14	70	50	41	37.90****
Visit incoming freshmen	55	48	32	68	76	40	11	18	6	37	29	21	6.03*
Follow-up former students	48	46	28	53	56	31	29	31	17	41	38	24	.39
Recruit new students	26	19	15	54	61	32	15	22	9	76	69	44	5.14*

Table 12 (Continued)

Chi-Square Analyses of Whether Teachers Spent Time on an Activity by Whether They Should Spend Time on An Activity (n=171)

	Should be performed						Should not perform						
	Did do			Did not do			Did do			Did not do			
Activity	Obs	Exp	Cell %	Obs	Exp	Cell %	Obs	Exp	Cell %	Obs	Exp	Cell %	Chi-square
Arrange student employment sites	25	16	15	50	59	29	12	21	7	84	75	49	9.58**
Organized/scheduled meetings with administrators	60	49	35	31	42	18	32	43	19	48	37	28	10.50**
Paper work (reports/records)	142	140	83	13	15	8	13	15	8	3	2	2	.81
Inventory vo-ag facilities	90	75	53	34	49	20	13	28	8	34	18	19	26.86****
Order supplies and equipment	102	97	60	30	35	18	24	28	14	15	10	9	3.07
Collect samples for classroom study	30	26	18	54	59	32	22	26	12	65	60	38	1.73
Up-date curriculum/ lesson plans	97	94	57	43	46	25	18	20	10	13	10	7	.98

Table 12 (Continued)

Chi-Square Analyses of Whether Teachers Spent Time on an Activity by Whether They Should Spend Time on An Activity (n=171)

	Should be performed						Should not perform						
	Did do			Did not do			Did do			Did not do			
Activity	Obs	Exp	Cell %	Obs	Exp	Cell %	Obs	Exp	Cell %	Obs	Exp	Cell %	Chi-square
Meet with advisory council	26	24	15	78	80	46	13	15	7	54	51	31	.44
FFA chapter meetings	73	67	43	63	69	37	11	17	6	24	17	14	4.65*
FFA leadership camp	41	35	24	69	75	40	13	19	7	48	41	28	3.91*
FFA chapter recreation/ socials	18	14	11	60	64	35	12	16	7	81	76	47	2.37
FFA state convention	81	55	47	30	57	17	4	30	2	58	31	33	67.79****
FFA alumni meetings	4	2	2	20	22	12	10	12	6	139	136	80	1.57
Conduct adult classes/ meetings	18	7	10	21	32	12	13	24	7	121	110	70	24.86****
Public relations	71	67	41	49	53	28	26	30	15	27	23	16	1.14
Community service	52	45	30	40	47	23	32	39	19	49	42	28	4.33*
Operate school farm/ greenhouse/ or other instructional lab	67	50	39	20	37	12	33	50	19	53	36	30	24.91****

Table 12 (Continued)

Chi-Square Analyses of Whether Teachers Spent Time on an Activity by Whether They Should Spend Time on An Activity (n=171)

	Should be performed						Should not perform						
	Did do			Did not do			Did do			Did not do			
Activity	Obs	Exp	Cell %	Obs	Exp	Cell %	Obs	Exp	Cell %	Obs	Exp	Cell %	Chi-square
Open vo-ag facilities to community	22	16	13	34	40	20	28	34	16	89	83	51	3.62
Perform school maintenance (non-departmental)	15	8	9	8	15	5	46	53	27	104	97	60	8.97**
Maintain vo-ag equipment/facilities	118	109	68	20	29	12	19	28	11	16	7	9	14.67****
Vacation (personal)	92	87	53	27	32	16	35	40	20	19	14	11	2.36
University summer school	12	6	7	38	44	22	9	15	5	114	108	66	7.77**
Attend non-credit workshops	49	41	28	58	66	34	18	25	10	48	40	28	5.14*
Attend regional NVATA meeting	5	2	3	29	32	17	5	8	3	134	131	77	4.31*

Table 12 (Continued)

Chi-Square Analyses of Whether Teachers Spent Time on an Activity by Whether They Should Spend Time on An Activity (n=171)

	Should be performed						Should not perform						
	Did do			Did not do			Did do			Did not do			
Activity	Obs	Exp	Cell %	Obs	Exp	Cell %	Obs	Exp	Cell %	Obs	Exp	Cell %	Chi-square
Attend regional NVATA meeting	5	2	3	29	32	17	5	8	3	134	131	77	4.31*
State teacher conference	85	83	49	58	60	33	15	17	9	15	13	9	.56
Washington leadership conference	4	1	2	10	13	6	4	7	2	155	152	90	14.33***
Advise 4-H club	8	3	5	9	14	5	22	27	13	134	129	76	9.43**
Other	8	7	5	10	11	6	62	63	36	93	92	54	.01

Note. Obs=number of observations per cell. Exp=expected value per cell. Cell %=percent of observations per cell.

*$p \leq .05$; **$p \leq .01$; ***$p \leq .001$; ****$p \leq .0001$.

Chapter V

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Summary of Findings

This study was designed to determine what vocational agriculture teachers believed should be accomplished and what actually was accomplished as part of their summer vocational agriculture program. Fifty state supervisors of vocational agriculture (100% response rate) and 227 vocational agriculture teachers (210 teachers, 92.5% response rate) were surveyed for this study (March-September 1983) (Initially 397 teachers were asked to help in an attempt to enlist the help of an adequate sample size).

More teachers indicated that paperwork (records/reports) should be (169) and was actually done (172) than any of the other 38 activities. SOEP supervision was allotted the highest percentage of time to be spent (23.3%) and time actually spent (16.2%) for the 38 activities by the teachers.

Twenty significant differences were detected between the percentage of time that should be spent and the percentage of the summer that was actually spent on an activity.

Five significant relationships were detected among selected program/teacher variables and selected activities or groups of activities but none of these were practically significant.

Twenty-four significant differences were found with post hoc chi-square analyses when the number of teachers that should or should not and/or did or did not perform an activity were compared.

Conclusions

The following conclusions were drawn from the findings of this study:

1. It was concluded that the teachers believed that over half of the summer should be spent on student contact activities. This study found that 168 teachers believed that 52 percent of the summer should be spent on a sum of 18 student contact activities. This differed from the reports of Hilton (1979), Holmes (1977), Bradley (1960), and Strong (1973) where the time to be spent on student oriented activities ranged from only 29% to 37.6% of the summer. However it did come close to agreeing with Noland's 1973 study where teachers recommended that 45.7% of the summer be spent with students while their administrators recommended 47.3%.
2. It was concluded that most of the activities indicated as being a necessary part of the summer program by over three-fourths of the teachers were not student oriented activities.

The findings revealed items considered necessary by the greatest number of teachers (more than 78%) included: paperwork (record/reports), visiting students with SOEP's, updating curriculum/lesson plans, attending state teacher conference, and maintaining vo-ag equipment/ facilities. Only one of these, visiting students with SOEP's was a student contact activity.

3. Although many non-student oriented activities are seen as necessities in the summer program, it was concluded that teachers do not believe that a large percentage of time should be spent on each of these non-student activities individually.

   The percentage of time teachers reported that should be spent on the most frequently indicated non-student activities (paperwork, updating curriculum, state teachers' conference, and maintaining vo-ag equipment/facilities) ranged from 3.7% to 5.8% of the summer while the only student contact activity rated in the top five (visiting students with SOEP's) was allotted 23.3%.

4. It was concluded that the majority of activities on which teachers spent significantly more time than they believed they should did not include students.

Findings revealed that seven of the ten activities where teachers spent significantly more time than they believed they should were non-student contact and included: performing school maintenance (non-vo-ag), meeting with administrators, paperwork (records/reports), attending summer teachers' conference, operating the school farm/greenhouse/or other instructional lab, vacation, and advising a 4-H club.

5. It was concluded that a large majority of the activities that received less teacher attention than teachers believed they should were of the student contact nature.

   Student centered activities that received significantly less attention than teachers believed they should were: visiting students with SOEP's, visiting cooperative work students, visiting incoming freshmen, recruiting new students, arranging student employment sites, FFA chapter meetings, and FFA chapter recreation/socials. Only three non-student activities received less attention than teachers believed they should, field days/trips without students, collecting samples for classroom study, and scheduled, organized meetings with administrators.

6. Considering the large number of significant differences identified in this study between what teachers believed

should be accomplished and what actually was done, it was concluded that vocational agriculture teachers in the United States are having difficulty planning and implementing the summer program. Possible sources of this may be: teachers have not been properly trained, teachers are not willing to make the planning effort or teachers need help from their state departments of education in scheduling all the necessary activities into the summer.

7. Although five significant relationships between selected program/teacher variables and the percentage of time spent on selected activities or groups of activities were detected, it was concluded that none were of practical significance. Those relationships were: contract length related positively to meetings with administrators ($\underline{\tau}$=-.1279), highest degree held related positively with meetings with administrators ($\underline{\tau}$=.1098), total FFA activities related positively to teachers being employed outside of teaching ($\underline{\tau}$=.1298), contract length related positively with performing school maintenance (non-vo-ag) ($\underline{\tau}$=.1236), and number of teachers in the department related negatively to performing school maintenance (non-vo-ag) ($\underline{\tau}$=-.1958).

This does not agree with the findings of Arrington (1981)

where both SOEP scope and FFA chapter activity level were positively related to contract length.

Recommendations

Based on the findings and conclusions of this study the following recommendations are made to aid vocational agriculture teachers in the development, planning, implementation and evaluation of their summer program.

1. Statewide preplanned activities should be entered into the summer schedule of activities first. Time for these should be limited to that actually necessary, especially if there are few student contact hours involved.
2. Teachers should continue to allocate a major portion of their summer to student contact and, where possible redirect time currently being spent in non-student contact activities to student contact activities. This time should include activities such as SOEP supervision, group and individual instruction, continuity of FFA chapter activities (both leadership and social), and visits with new and prospective students.
3. Vocational agriculture teachers in both one-teacher and multiple-teacher departments should distribute a schedule of their summer plans to administrators and students in an attempt to diminish requests for non-student contact activities and to maximize use of the time available to students.

4. Time spent by the vocational agriculture teacher on paper work, departmental maintenance and other non-student contact activities should be minimized. If these activities are, in fact, a part of the vocational agriculture teacher's job during the summer months, ways to minimize the non-student contact time might include: (a) have students (juniors and seniors) take inventory and perform equipment and shop maintenance prior to year end, and (b) use time management techniques (for example, efficient management of paper work, handle it only once instead of delaying it).
5. Further research should be done to determine if, contrary to the findings of this study, any practically significant relationships do exist between program and teacher variables and the amount of time spent on summer activities.

Implications

Since the primary reason for extending the contract of the vocational agriculture teacher is the supervision and/or instruction of students, it is important for teachers to maximize the time spent with students and the time spent on activities that are unique to the summer. If this is done, the vocational agriculture teacher can easily justify a year-round program and a 12-month extended contract. No other reasons alone justify a

year-round program unless the entire school operates in that manner. The many differences that existed in this study point out the need for better planning and implementation in order to serve the students during the summer.

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APPENDIX A
Letter to Head Teacher Educators

January 10, 1983

Dear Teacher Educators,

We are beginning a project concerning the summer program of Vocational Agriculture throughout the United States with a special emphasis on program improvement in Louisiana. A computer search of education and social science data bases (including ERIC, CIJE, and Dissertation Abstracts) has uncovered many papers and articles. We are now interested in finding items that would not be included in these bases, such as theses, unreported papers and other staff studies.

If any theses or other research not included in the data bases have been completed by your faculty or graduate students, we would appreciate your either sending us the material or informing us as to how to obtain these materials.

Thank you very much for your time and assistance. Please complete the enclosed postcard if you are not aware of any additional studies that may be of help to us.

Sincerely,

Joe W. Kotrlik
Project Director

Susan S. Camp
Project Coordinator

APPENDIX B
Letter to Ask for Help from Teacher Sample

March 22, 1983

¥FIRST_NAME¥ ¥LAST_NAME¥
Vocational Agriculture Teacher
¥SCHOOL_NAME¥
¥CITY¥, ¥STATE¥ ¥ZIP_CODE¥

Dear ¥FIRST_NAME¥:

For many years there have been questions raised about what vocational agriculture teachers do during their summer employment. Since the summer program is such an important part of the total vocational agriculture program, this is a very critical issue. In an attempt to answer these questions, we are conducting a national study of summer programs in vocational agriculture. You have been selected as one teacher in a very small sample from over 12,000 instructors in the United States. We are asking for your assistance in this study. Your participation in the study would include the following responsibilities on your part:

1. Return the enclosed card indicating your agreement to participate in the study.
2. Complete a short questionnaire about yourself and your summer program at ¥SCHOOL_NAME¥. This questionnaire will be mailed to you in mid-April.
3. Take about 10 minutes every two weeks during the summer to summarize <u>your</u> time on the job. We will mail all forms and self-addressed, stamped envelopes for your use in mid-May.

We hope that you will agree to help us with this study. If you will be able to help, please complete and return the enclosed card. We will then add your name to our approved participant list.

Your time and effort with this will be greatly appreciated. Thank you.

Sincerely,

Susan S. Camp
Project Coordinator

Joe W. Kotrlik, Associate Professor
Vocational Agricultural Education

PLEASE COMPLETE AND MAIL THIS CARD.

_____ I will help with the summer programs study.

_____ I will not help with the summer programs study.

¥FIRST_NAME¥ ¥LAST_NAME¥
Vocational Agriculture Teacher
¥SCHOOL_NAME¥
¥MAILING_ADDRESS¥
¥CITY¥, ¥STATE¥ ¥ZIP_CODE¥

APPENDIX C
Questionnaire to State Supervisors

SECONDARY VOCATIONAL AGRICULTURE SUMMER PROGRAMS INFORMATION

1. State of _____

2. _____ Total number of secondary vocational agriculture programs.

3. _____ Number of secondary production agriculture programs.
_____ " " " agricultural business programs.
_____ " " " floriculture programs.
_____ " " " landscape/horticulture programs.
_____ " " " combined horticulture programs.
_____ " " " agricultural mechanics programs.
_____ " " " food/meat processing programs.
_____ " " " natural resources programs.
_____ " " " animal care programs.
_____ " " " farm management programs.

(PLEASE SPECIFY NAME OF OTHER SECONDARY PROGRAMS).

_____ " " other programs (_____).
_____ " " other programs (_____).
_____ " " other programs (_____).
_____ " " other programs (_____).

4. _____ Number of secondary vocational agriculture teachers.

5. State base salary for secondary vocational agriculture teachers is

$_____ for _____ months.

6. Please describe the method for determining contract length for vocational agriculture teachers in your state. (Example: All production agriculture programs-12 months; all other types of programs-10 months).

_____

_____

_____

_____

_____

_____

7a. yes no FFA state convention is held during the summer.

b. yes no Vocational agriculture teachers conference is held during the summer.

c. yes no FFA camp is held during the summer.

d. yes no Fairs are held during the summer.

e. yes no Technical up-dates for vocational agriculture teachers are held during the summer.

f. yes no Other statewide activities, in addition to those in items 7a-7e are held for vocational agriculture teachers during the summer. If yes, please specify.

_____

_____

_____

8. yes no All vocational agriculture teachers are visited in their communities, during the summer, by their state supervisor.

If yes, how often? _____

9. yes no Vocational agriculture teachers are required to submit a plan of their summer activities.

10. yes no There are printed rules/guidelines for summer programs of vocational agriculture. If yes, please send a copy.

11. yes no There is a standard form for reporting vocational agriculture teachers summer activities to the State Department of Education. If yes, please send a copy.

12. yes no There is an evaluation system/instrument used for summer programs in your state. If yes, please describe and/or send a copy.

13. If there are any unique features about the summer program in your state please list them below or send printed matter describing these features._____

_____

_____

_____

_____

_____

_____

APPENDIX D
Letter to Field Test Teacher Questionnaire

April 6, 1983

Dear Vo-Ag Teacher,

We have selected you to respond to the enclosed questionnaire to help us validate the instrument for a national study of summer programs of Vocational Agriculture.

Please complete the questionnaire, note any items that are unclear or confusing, make any suggestions that you feel would improve the study, and return it immediately to us at Louisiana State University.

Thank you very much for your time and assistance in this important task.
Sincerely,

Joe W. Kotrlik
Associate Professor,
Vocational Agriculture Education

Susan S. Camp
Project Coordinator

APPENDIX E
Bi-weekly Summary Sheet

BI-WEEKLY SUMMARY SHEET FOR TIME SPENT IN VO-AG SUMMER EMPLOYMENT

Two week period covering Monday,_____to Friday_____,1983.

ACTIVITY	students contacted	hours spent	OR	days spent
shows, fairs and/or sales				
contests				
field days and/or trips with students				
field days and/or trips without students				
visit students with S.O.E.P.'s				
visit cooperative work program students at the job site				
visit adult students				
visit incoming freshmen				
follow-up former students				
recruit new students				
arrange for student employment sites				
organized/scheduled meetings with administrators				
paperwork (reports/records)				
inventory Vo-Ag facilities				
order supplies/equipment				
collect samples for classroom study				
up-date curriculum/lesson plans				
meet with advisory committee/council				
FFA chapter meetings				
FFA/leadership camp				
FFA chapter recreation/socials				
FFA State convention				
FFA alumni meetings				
conduct adult classes/meetings				
public relations				
community service				
operate school farm/greenhouse/or other instructional laboratory				
open Vo-Ag facilities to community members				
perform school maintenance (non-VO-AG)				
maintain Vo-Ag equipment/facilities				
vacation (personal)				
university summer school				
attend non-credit workshops				
attend regional NVATA meeting				
state summer teachers' conference/ convention				
Washington Leadership Conference				
advise 4-H clubs				
other (please specify)				
TOTAL FOR THIS TWO WEEK PERIOD********				

APPENDIX F
First Letter to State Supervisors

January 14, 1983

Dear Supervisor,

This spring we will be conducting a study of vocational agriculture summer programs in the United States with an emphasis on program improvement in Louisisana.

We would appreciate your helping in two ways. First we are asking that you complete the enclosed form with current information concerning your state's secondary summer program. Secondly, we would like you to send any printed guidelines, rules, or handbooks that are used in your state for conducting the summer program.

This information is needed by early February so that we may proceed in developing the instruments for the remainder of the study.

Thank you very much for your time and assistance.

Sincerely,

Joe W. Kotrlik
Project Director

Susan S. Camp
Project Coordinator

APPENDIX G
First Teacher Questionnaire

PART I:

Please complete each item with the facts that best describe you, your present position and teaching program. (Please note, that even though you may teach in a multiple teacher department, all questions refer only to you and your part of the total vocational agriculture program.)

1. Teacher's age:

_____ 20-25	_____ 46-50
_____ 26-30	_____ 51-55
_____ 31-35	_____ 56-60
_____ 36-40	_____ 61-65
_____ 41-45	_____ 66 and over

2. Teacher's sex: _____Female _____Male

3. Degrees held:

_____ Bachelor of Arts in _____

_____ Bachelor of Science in _____

_____ Master of Education in _____

_____ Master of Science in _____

_____ Ed.D. in _____

_____ Ph.D. in _____

_____ other(s) (please specify) _____

_____

_____

4. _____ # of years teaching vocational agriculture.

_____ # of years teaching vocational agriculture in this state.

_____ # of years teaching vocational agriculture at your present school/position.

5. Length of your vocational agriculture teaching contract (1982-83).

_____ 12 months	_____ 11 months	_____ 10 months
_____ 11½ months	_____ 10½ months	_____ 9½ months
		_____ 9 months

6. Official title of your vocational agriculture program as determined by your school district and/or state (example: Farm Business Management, Landscape Horticulture, Production Agriculture, etc.):

_____.

7. _____ # of teachers (include yourself) in your VO-AG department.

8. Which of the following levels of students are you responsible for in your program(s)?

____ 7th grade	____ 9th grade	____ 11th grade	_____ Young adults
____ 8th grade	____ 10th grade	____ 12th grade	_____ Adults

9. _____ # of day (grades 7-12) students that you are responsible for.
   _____ # of young adult and adult students that you are responsible for.

10. Dates of your summer employment (example: May 27-August 25):

    _____

11. Which of the facilities below are used as a part of your present Vo-Ag program?
    ____ school crop farm (corn, soybeans, wheat, etc.)
    ____ school livestock facilities (sheep, hogs, cattle or horses)
    ____ greenhouse
    ____ nursery
    ____ gardens (vegetable and/or flower)
    ____ food processing (meat and/or vegetables)
    ____ small animal care laboratory (grooming, lab technician, acquarium, etc.)
    ____ forests
    ____ mechanics laboratory
    ____ other(s) (please specify) _____
    _____
    _____
    _____

12. Do you farm or engage in other business activities to supplement your income?
    _____ yes _____ no
    If yes, please describe _____.

Please make any comments or statements that will help us better understand your situation or program.
If we have left out any important aspects of the program that you feel must be studied, please list them below.

Comments:_____

_____

_____

_____

_____

_____

_____

_____

PART II:

Below are listed various possible summer activities of a teacher of vocational agriculture.

1) Please indicate with an X those activities that you feel <u>should</u> be performed by all Vo-Ag teachers with extended time in their contract for summer employment.
2) Next, assign to those marked with an X, a percentage of total summer employment that should be devoted. Total percent should equal 100 for all activities marked.

percent of time	(X)	Activity
_____	_____	shows, fairs and/or sales
_____	_____	contests
_____	_____	field days and/or trips with students
_____	_____	field days and/or trips without students
_____	_____	visit students with S.O.E.P.'s
_____	_____	visit cooperative work program students at the job site
_____	_____	visit adult students
_____	_____	visit incoming freshmen
_____	_____	follow-up former students
_____	_____	recruit new students
_____	_____	arrange for student employment sites
_____	_____	organized/scheduled meetings with administrators
_____	_____	paperwork (reports/records)
_____	_____	inventory Vo-Ag facilities
_____	_____	order supplies/equipment
_____	_____	collect samples for classroom study
_____	_____	up-date curriculum/lesson plans
_____	_____	meet with advisory committee/council
_____	_____	FFA chapter meetings
_____	_____	FFA/leadership camp
_____	_____	FFA chapter recreation/socials
_____	_____	FFA State convention
_____	_____	FFA alumni meetings
_____	_____	conduct adult classes/meetings
_____	_____	public relations
_____	_____	community service
_____	_____	operate school farm/greenhouse/or other instructional laboratory
_____	_____	open Vo-Ag facilities to community members
_____	_____	perform school maintenance (non-VO-AG)
_____	_____	maintain Vo-Ag equipment/facilities
_____	_____	vacation (personal)
_____	_____	university summer school
_____	_____	attend non-credit workshops
_____	_____	attend regional NVATA meeting
_____	_____	state summer teachers' conference/convention
_____	_____	Washington Leadership Conference
_____	_____	advise 4-H clubs
_____	_____	other (please specify) _____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
100%		TOTAL PERCENT OF SUMMER EMPLOYMENT TIME

APPENDIX H
Letter Enclosed with 1st Questionnaire

April 25, 1983

Dear Vocational Agriculture Teacher;

Thank you for agreeing to help with our National Summer Programs study. We will try to keep our promise to you and not ask for more than 10 minutes of your time every two weeks. Hopefully all of us in Vocational Agriculture will gain from this research.

The enclosed questionnaire has two parts. The first is designed to acquire a description of you and your Vo-Ag program. The second is an opportunity for you to give your perceptions of what should be done by all Vo-Ag teachers with extended time in their contract for summer employment.

In May we will send you the bi-weekly summary sheets with enough stamped envelopes for their return. Please be prompt in the return of all forms, since continual follow-up of 600 teachers would be overwhelming.

Once again, thank you for your valuable time and assistance.

Sincerely,

Joe W. Kotrlik, Associate Professor
Vocational Agricultural Education

Susan S. Camp
Project Coordinator

APPENDIX I
1st Questionnaire Follow-up

May 16, 1983

Dear Vocational Agriculture Teacher,

We have not yet received the questionnaire concerning the description of your program and your rating of summer program activities. Please complete and immediately return the attached questionnaire.

Thanks once again for giving your valuable time to this study.

Sincerely,

Joe W. Kotrlik
Susan Camp

Dear Summer Programs Project Participant;

Please complete and return the two page questionnaire describing you and your program and indicating necessary summer activities as soon as possible. This is necessary so that data analysis can begin prior to the collection of your bi-weekly summer summaries.

THANK YOU FOR YOUR COOPERATION!!!!!!

Susan Camp

APPENDIX J
Letter Enclosed with Bi-weekly Summary

May 16, 1983

Dear Vocational Agriculture Teacher,

This is the mailing that you have all been waiting for. Enclosed are enough bi-weekly summary sheets and return envelopes for the entire summer. Please take the time every other Friday to summarize your activities for the past two weeks as follows:

1. Date the summary sheet for the appropriate 2 week period.
2. Summarize the hours or days spent on each activity.
3. If you worked with students, record the number of students for that activity.
4. Total the number of students, hours and days. (hours + days should equal the total time worked in the 2 week period.)
5. Mail the summary sheet in the postage paid envelope.

Please realize that you are not expected to work on all activities each week. Please, only record time for activities that you actually performed during your summer employment time., All reports received will remain completely confidential.

Once again please be prompt in the return of the forms since it will be extremely difficult to follow-up this large sample. If you have any questions, call Susan Camp at (504) 388-5748.

Thank you for your time and help in this giant task. Have a productive and healthy summer.

Sincerely,

Joe W. Kotrlik,
Associate Professor
Vocational Agricultural Education

Susan S. Camp
Project Coordinator

APPENDIX K
Summary Follow-up

July 14, 1983

Dear Summer Programs Participant,

As of July 14, 1983 we have not received any of your bi-weekly summaries of your summer activities reporting forms. It is very important that these summaries be completed and returned every other week so that you do not forget what jobs and activities you were involved in during this period.

If you have any questions or problems, or have lost your reporting forms, please feel free to call me COLLECT at (504) 766-6150, in the evening.

Thank you very much for your time and assistance in this study.

Sincerely,

Susan S. Camp

APPENDIX L
Final Follow-up Letter

ATTENTION!!!!!!!!!!

September 1, 1983

Dear Summer Programs Project Participant:

Since the summer has drawn to a close, we would like those of you that have not returned any of the bi-weekly summary sheets to please take one of the blank sheets, label it SUMMARY and summarize your summer activities to the best of your recall. We realize that the summer can be a very busy time and even though you agreed to help with the study something prevented you from sending the forms back to us.

The results from your summary will be analyzed separately from those that replied every other week and compared to those results. Please send the one completed form if at all possible so that we will be able to complete the study, analyze the data and publish the information.

Thank you very much for your time and assistance. If you need one of the forms or if you have any questions please call me in the evening, COLLECT at (504) 766-6150.

Sincerely,

Susan S. Camp
Project Coordinator

APPENDIX M
Information Tables for Teachers and Programs

Table M-1

Age of Vocational Agriculture Teachers

Age	Frequency	%
20-25	14	6.70
26-30	53	25.36
31-35	49	23.44
36-40	28	13.40
41-45	20	9.57
46-50	18	8.61
51-55	7	3.33
55-60	13	6.229
61-65	7	3.35
66 and over	1	.48
Total	210	100.00

Table M-2

Gender of Vocational Agriculture Teachers

Gender	Frequency	%
Female	8	3.9
Male	196	96.1
Total	204	100.0

Table M-3

Highest Degree Held by Vocational Agriculture Teachers

Degree	Frequency	%
Bachelor of Arts	3	1.42
Bachelor of Science	103	49.05
Master of Education	55	26.19
Master of Science	45	21.43
Doctor of Education	3	1.43
Doctor of Philosophy	1	.48
Total	210	100.00

Table M-4

Years of Teaching Experience of Vocational Agriculture Teachers

Years	Present position	In state	Total
1-5	72	50	53
6-10	55	52	63
11-15	31	31	35
16-20	10	23	21
21-25	13	14	15
26-30	10	9	8
31-35	3	6	9
36 and over	3	3	3
Total	197	188	207
Mean	10.57	12.51	12.75
SD	10.36	9.75	10.18

Table M-5

Grade Levels Taught by Vocational Agriculture Teachers (n=210)

Grade level	Frequency	%
7th	14	6.67
8th	21	10.00
9th	155	73.81
10th	185	88.10
11th	195	92.86
12th	193	91.91
Young adults	73	34.76
Adults	92	43.81

Table M-6

Types of Facilities Available to Vocational Agriculture Teachers (n=210)

Facilities	Frequency	%
Mechanics lab	143	68.42
Greenhouse	80	38.28
School crop farm	55	26.32
School livestock facilities	45	21.53
Forest	44	21.05
Nursery	43	20.57
Garden (vegetable/flower)	42	20.10
Food processing	13	6.22
Small animal care lab	5	2.39

VITA

Susan Skripac Camp, daughter of Mary Lenches Skripac and George Skripac, was born on May 10, 1953 in Youngstown, Ohio. She graduated as salutatorian from Youngstown North High School in 1971.

She enrolled in The Ohio State University and received the B.S. degree in Agriculture with an animal science major in March of 1975. She also completed two quarters of graduate study in animal reproductive physiology at The Ohio State University, 1975-76.

From 1975-1978 she was employed in several positions in the equine industry. In 1978 she was employed to teach production agriculture at the Mahoning County Joint Vocational School and in 1979 at the Trumbull County Joint Vocational School, both in Northeast Ohio.

While teaching in Ohio she attended Kent State University and was awarded the M.Ed. in Vocational Education in August of 1981.

In August of 1981, Susan enrolled at Louisiana State University in Baton Rouge to complete the requirements for the Doctor of Philosphy in Vocational Agricultural Education. She was awarded an assistantship and was involved in research, teaching, and service for the department of Vocational Agricultural Education.

VITA (continued)

Following completion of all coursework required for the degree she was employed by the Nevada State Department of Education as an agriculture consultant for one year. A leave was taken to begin raising a daughter and to complete the requirements of the degree at Louisiana State University.

The author holds membership in various professional and honorary associations.

She is married to Dale Wendell Camp and is the mother of a daughter Ashley Alyson.

DOCTORAL EXAMINATION AND DISSERTATION REPORT

Candidate: Susan Skripac Camp

Major Field: Vocational Agricultural Education

Title of Dissertation: Summer Time Allocation in Vocational Agriculture Programs in the United States

Approved:

Major Professor and Chairman

Dean of the Graduate School

EXAMINING COMMITTEE:

Date of Examination:

June 20, 1986